

11 A NEW CONSTITUTION

The sustainable economy's first principle requires that the interests of the next generation are taken into account. The next generation inherits as good if not better assets so that they can choose how to live their lives. What generations beyond this do is outside the scope of the sustainable economy.

These interests are flagrantly overlooked by the current generation. The systems are not properly maintained, let alone enhanced. When it comes to the environmental damage that continues to be caused by current unsustainable economies, the intergenerational rule is being systematically broken. Current spending is supported by borrowing, and the bias is the other way around, with the next generation subsidising the current one.

To prevent this disregard of the interests of future generations, and in recognition of their inability to vote, there needs to be some constitutional device to embed their interests, some form of a generational constitution. Without this constraint on majority rule by the current generation, and with constitutions ignoring the future constituency, we are doomed to more of the same. Drafting a precise constitution is a matter for legal experts. Here the focus is on the concept and the broad principles.

The Case for Constitutions

Most countries have constitutions and most of these are written down. Some are manipulated and ignored. Russia's constitution, for example, stated the maximum period a president could serve, until this is overturned. Even China had a constitution with a time limit on its presidency until it, too, is overturned. Putin and Xi Jinping show a callous disregard of the rules when it suits them. Neither of these examples is evidently better than the UK, which is one of the few democracies that does not have a proper written constitution. If one day the UK elects a Trump, then the absence of a constitution may be much regretted. It is the US constitution which prevented a Trump being a *ruler* rather than an elected president, and it is the checks and balances between the executive (the President), legislature (Congress and the Senate) and judiciary (the Supreme Court) branches of government, and the interactions between all of these, that provided some stability in the US during the Trump presidency.¹

The sheer variety and experience of constitutions begs the question of what a good constitution might look like. Liberal political theory provides a conceptual way of thinking about a constitution, from John Locke onwards.² The liberal idea is to take the individuals, 'founding fathers', and ask them to come up with a set of rules which should frame and constrain the actions of governments (and hence limit a dictatorship of the majority of current voters over current minorities and the next generation's interests). From Locke to Rawls, the liberal constitution envisages an abstracted context in which, in ignorance of the subsequent positions in society (or simply ignoring them in John Stuart Mill's representative democracy³), each individual works out what would be a just society in which the rights of each are respected and the outcomes are fair and reasonable. It is a form of social contract.

¹ It would have been more difficult in the US to break international law, as the UK proposed to do over the Northern Ireland Protocol agreed as part of the BREXIT arrangements.

² J. Locke (1680), *Two Treatises of Government*.

³ Volume XIX of *The Collected Works of John Stuart Mill* contains a number of Mill's essays on politics and his book *Considerations on Representative Government*. J.M. Robson (ed.) (1963–91), *Collected Works of John Stuart Mill*, 33 vols., Toronto: University of Toronto Press, London: Routledge & Kegan Paul, <https://oll.libertyfund.org/title/robson-collected-works-of-john-stuart-mill-in-33-vols>.

The most famous recent version of the liberal constitution is provided by John Rawls.⁴ In order to derive the principles of his ideal state of justice, Rawls assumes that his delegates meet together in what he calls a veil of ignorance over their subsequent position in society. These are reasonable (and, in Rawls's case, rational) people, able to think beyond their immediate circumstances. They must be educated enough to understand the choices in front of them, and not be so poor themselves that they can focus only on immediate needs. It is a deliberately informationally restricted choice.⁵

In this veil of ignorance, Rawls claims his two principles of justice will be chosen. These are first that each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for all, and second that social and economic inequalities have to be attached to offices and positions open to all (Rawls's equality of opportunity principle).⁶ These inequalities have to be to the greatest benefit of the least advantaged members of society (Rawls's difference principle), translated into economics as maximin – maximise the benefits to the least well-off – and raising the question of who exactly is the least well-off, and in what units. Thus we have: an overriding priority of liberty, equality of opportunity and the difference principle. Although Rawls does not require equality of outcomes, or the utilitarian greatest happiness to the greatest number, he is nevertheless both equality-leaning and quite close to utility maximisation, once the diminishing marginal utility of money is brought into consideration.

Abstraction is the crucial liberal element. It treats the autonomous individuals as coming together for purposes of mutual self-interest. This is in contrast with more communitarian traditions which see society as moulding the individuals as part of that society, following Jean-Jacques Rousseau.⁷ It is also at variance with conservative traditions, which stress

⁴ J. Rawls (1971), *A Theory of Justice*, Oxford: Oxford University Press.

⁵ *Ibid.*, pp. 136–42, section 24, 'The Veil of Ignorance'. On p. 137 he states: 'as far as possible...the only particular facts which the parties know is that their society is subject to the circumstances of justice and whatever this implies. It is taken for granted, however, that they know the general facts about human society.' Rawls goes on to list them, to include 'whatever general facts affect the choice of the principles of justice'.

⁶ The two principles are listed in Rawls, *A Theory of Justice*, p. 60: 'First: each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others. Second: social and economic inequalities are to be arranged so that they are both (a) reasonably expected to be to everyone's advantage, and (b) attached to positions and offices open to all.'

⁷ J.-J. Rousseau (1762), *The Social Contract*; and *The Confessions of Jean-Jacques Rousseau*.

the slow evolution of social institutions and the special relationships built up through history, in the tradition of Hume and Edmund Burke.

One curious and decisive feature of the veil of ignorance is Rawls's assumption that the participants will all be risk-averse. If they are self-interested, each will want to make sure that if they turn out to be the worst-off in the society that follows, they will be looked after. This is a personalised version of the precautionary principle. Assuming this is why Rawls can assert that his individuals, in the veil of ignorance, choose the principle that any inequality is justified only if it is to the benefit of the worst-off in society, in case it is them. There is no room for *Dragon's Den*, *Love Island* and a host of popular media focused on success, winning and prizes.

Personal risk aversion is a very demanding and quasi-socialistic principle, and very different from the risk aversion in respect of systems in the sustainable economy. Modern capitalist and authoritarian societies are organised rather differently, with large incentives to make supernormal profits to motivate enterprise and investment. Rawls's approach is certainly not like the sort of society envisaged by Keynes with his animal spirits, and it is at odds with the Austrian tradition focused on incentives and entrepreneurs.

In theory, the Keynes and Austrian approaches could be reconciled by presenting a sort of trickle-down argument, where all the inequalities that result lift all boats, especially for the worst-off in the society. Capitalism in this trickle-down model has the unintended consequence of making the poor better off than they would be in a society that aimed directly for equality.⁸ It is what Keynes might have supported as an unintended consequence of his multiplier, with demand-side stimuli creating the 'means to prosperity'.⁹ The evidence for 'trickle-down' is scant, and equality does not motivate capitalists: they go after profits, and the competitive process erodes these so that innovation, technical progress and lower prices are all delivered, in the process also employing all those who want jobs at their marginal product or above. Capitalists do not go about trying to meet Rawls's difference principle.

⁸ The claim against was presented as the Laffer curve.

⁹ See J.M. Keynes (1933), 'Means to Prosperity', reprinted in J.M. Keynes (2010), *Essays in Persuasion*, London: Palgrave Macmillan. Writing in 1933, Keynes states that his scheme 'embodies an advance towards economic equality greater than any that we have made in recent times', p. 368.

Being at the Table

Who to include? The key feature of the sustainable economy is that it is concerned with the economy over time. The next generation matters. But future people are not here and cannot take part in the constitutional conventions writing the rules. How then to bring the next generation to the table? The critical principle is of fairness between the generations, and with it the idea that the current generation, like its predecessors, has a duty to act as good stewards.¹⁰ This is what our first principle requires. The next generation should not be treated differently to the current one. Each generation comprises leaseholders, not freeholders, of the assets, natural or otherwise.

Amongst the reasons why we might want the next generation at the table is that they may have different preferences to ours. But this is hopeless: we cannot know how these might differ, and hence it is reasonable to assume that human nature is everywhere and always the same. It follows that we do not need them at the table because they may be different. Current people are in this sense representative of future people.

In any case, in the capabilities approach the detail of preferences does not matter because we are not trying to predetermine those choices. Crucially, we are not trying to make future people happy or to equalise utility across the generations in an effort to gain the greatest happiness over all time. The aim is more limited: to allow the next generation to exercise their choices in the ways that best suit them. We thereby escape the utilitarian's difficulties.

In the sustainable economy, the next generation must be empowered with the assets which provide for their capabilities to make their choices. The constitutional rule between the generations is a contract for the transfer of assets from the current to the next generation, and a contract which specifies the state of those assets and the duty of the current generation to be good stewards of those assets, which are temporarily in its care. The contract also transfers debts, incurred only in exchange for passing on enhanced assets. The balance sheet is the account that reflects both the stewardship (the capital maintenance) and the enhancements.

¹⁰ Rawls has a 'just saving rule' to address this question, but it is not grounded on assets, capital maintenance and the sustainable economy set out here.

The stewardship approach to meeting the requirements of the sustainable economy has the advantage that there is no need to be precise about exactly who is and who is not in the next generation. It merely requires that the capital maintenance and other considerations are met. There may be specific cases where the time horizon makes a critical difference to adjudicating on compliance. There always will be, in any constitutional arrangement. This is for a supreme court to decide upon.

The rights embedded in this constitution are not simply the maximisation of freedom to exercise choices. The constitution includes the right to do what you want, subject to not harming the ability of others to do so, with 'others' including future citizens as well as current ones. But the contract between the generations also requires more than a negative refrain from harm to the next generation. It is more than Mill's *On Liberty*, Hayek's *Constitution of Liberty* or the first of Rawls's principles, and requires certain positive actions. Only Rawls spells this out in his second principle.

The negative freedom from interference from others that the liberal right advocates neglects the positive aspects of stewardship and the extent to which the assets have to be created and sustained by society. The negative liberty picture of atomistic individuals in the economists' perfect competition model assumes that the assets are all discrete, atomistic and small. It neglects the creation of the great system assets and the protection of the environment, the assets at the heart of the sustainable economy. These will not arise spontaneously from individual actions. They require positive intervention, and a significant role from the state.

Formalising Sticky Rights

Constitutional rules can never be absolute. There are no fundamental human rights to which any individual has an absolute trump card in respect of other citizens.¹¹ This is easily seen by looking at any of the individual rights in the American constitution. The right to bear arms is an example; another is religious freedom. In the first case, it is possible to construct cases where this would be a bad idea, and in the second,

¹¹ See R. Dworkin (1977), *Taking Rights Seriously*, Cambridge, MA: Harvard University Press, and his discussion of rights as trumps.

there can be bad religions. Even the right to life is not sacrosanct to each and every individual in every situation. The police do, from time to time, legitimately shoot and kill people. People die in pandemics even if, with enough resources, they could be saved. Soldiers die in defence of constitutions. Special forces kill Al-Qaeda leaders.

Rather, what a constitution does is make certain rights and rules *sticky*, hard but not impossible to overcome. Changing them requires going through a process which is typically subject to review, appeal and legal judgments. There are supermajority rules, extended periods to allow reconsideration, court hearings and adjudications, referenda and ‘independent’ regulators. Revisions must be feasible: the job is just to make them difficult when it can be argued that they might damage the interests of the next generation.

There is no perfect constitution: they are the products of their time of writing and specific historical circumstances, with very uncertain prospects and uncertain futures. Our age is one with new massive challenges. In our time, climate change and biodiversity loss are literally life-threatening.

Constitutions are designed to protect citizens from oppressive majorities. They are limits on democracy, and also protections against dictators. They allow for an orderly change of governments, rules for the election of governments and rules for their removal. Minorities are protected from abuse by powerful majorities. Protecting future generations from the possible tyranny of the current generation is an extension of this idea.

Constitutions are contracts between the members of a society at a point in time and over time. The contract sets out the principles that govern conduct. It lays down how these relationships will play out, how the law of the contract will be governed and how violations will be dealt with. The contract can be interpreted as a set of property rights, but, as we saw previously, there are no absolute property rights, and public goods pose special problems.

The First Principle

The first constitutional principle of the sustainable state is that each generation, as steward of the assets it inherits, must look after them and bequeath the next generation a set of assets at least as good as those it inherited. This should be written into the constitution.

This general principle of course requires interpretation, about which there will be public arguments and debates. As time passes, so technology, ideas and knowledge change. There is a difference between a rule that says that a specific set of physical assets must be maintained and one that says that the aggregate set of assets must be maintained, between a rule that gives priority to renewable natural capital over the man-made and human and social capital and a rule which protects all capitals. Some assets could be replaced by others.

Against this physical flexibility, it is possible to compare different operational outcomes. It might be that the capabilities can be held constant over time, but the physical values of the assets change as long as the operating values are as good.¹² To mainstream economists this is simply a recognition of substitutability within the bundle of assets. The next generation can get more iPhones, but there may be fewer swallows.

It is immediately apparent that full flexibility is unlikely to deliver the desired outcome because some assets, particularly renewable natural capital, are more important than others. But so too is full rigidity. This means that some assets should be physically maintained in almost all circumstances (subject to a judicial or other process) and others can be quite flexible. A great deal of physical capital has a limited life anyway, and buildings and equipment are constantly changing. On the other hand, biodiversity is largely given and extinctions are not just now but for all times. Even those bits of biodiversity that do not have any obvious use now may do to future generations. They are options, and once gone impossible to recreate unless we get really good at genetic recreation and environmental reconstruction to allow the resurrected species to flourish. The written constitution will need to prioritise some assets over others, and especially renewable natural capital, providing special protection. It needs targeted stickiness.

There are various ways some flexibility could be institutionalised. There could be a generational timescale for formal constitutional rules, with a presumption of no change unless clearly demonstrated to be relevant. There could be independent bodies to review which assets are maintained. Part of this reviewing function is statistical and related to the accounting rules and conventions; part is analogous to the

¹² On operating versus physical capital maintenance, see J. Edwards, J. Kay and C. Mayer (1987), *The Economic Analysis of Accounting Profitability*, Oxford: Clarendon Press; and G. Whittington (2017), *Value and Profit: An Introduction to Measurement in Financial Reporting*, Cambridge: Cambridge University Press.

Law Commission, in looking at past legislation and making recommendations for changes.¹³ Part could be a once-in-twenty-five-years constitutional convention. Laws such as the Climate Change Act (amended) 2019 and the Environment Act 2021 set out statutory targets. These would have to be consistent with the constitutional rules, with the potential to appeal to a supreme court where there are allegations that they have fallen short of the requirements of the principles of the constitution.

The next step in a written constitution is to set out the rights, duties and obligations of *citizens* (not consumers) within this framework of assets. The central argument is that the entitlement of citizens is to the primary assets, and that these comprise the basic systems (the natural, physical, human and social capitals) which are the framework for the economy to function and for citizens to thrive. These USOs vary over time. They now include, for example, broadband. There cannot be a simple constitutional list, but there can be a process for deciding what they are and how they are changed over time. Where there is doubt, a supreme court could adjudicate.

Arguments about the boundary between what is and what is not in this category should not distract us from the core aspects all agree should be included. These might include the major utility networks, health and education. The constitution defines the general entitlements of citizens, and the process of deciding whether they are fulfilled. There will be borderline cases.

The USOs include the entitlement to the national dividend, reflecting the return on assets that all citizens have a stake in. In the sustainable economy, these include the RABs for all the main privatised utilities, as well as the return on assets directly owned by the government. Both are public assets. That return can come through the provision of the USO at below cost, and through a return to reflect the cost of capital.

Embedding the Polluter-Pays and Precautionary Principles

In meeting the overarching objective, there are two further principles essential to the sustainable economy. The first is the polluter-pays principle. Internalising the costs of pollution is a necessary condition of the sustainable economy.

¹³ See for a description www.lawcom.gov.uk/.

There will be debates and disputes about who is the ultimate polluter and establishing responsibility. But then there are always debates about property rights, and the polluter-pays principle is in effect the right to protection from damage to property by other parties. The principle introduces stickiness by putting the question of responsibility for pollution into the constitutional context.

The second is the precautionary principle. The institutions that oversee compliance with this principle will have to make judgements about the gap between expectations and uncertainties. We do not know the full consequences of global warming; nor do we know how great the warming will be on the basis of the measures we are taking. Similarly, we have little idea how biodiversity will turn out as a result of a variety of policies that might or could be adopted.

The implication is that, for all the key systems, a margin for resilience should be introduced above the mean expected outcomes, to ensure that the next generation is *most likely* to end up a bit ahead. There are two reasons for this: it takes account of irreversibility and asymmetries; and of the damage already done. Some catch-up restitution is needed anyway. The first reason relies on the idea that the benefits to the next generation of avoiding risk are greater than the costs today of meeting them, because the bad outcomes are likely to be asymmetrically large and, in the case of renewable natural capital, irreversible. The second reason is an ethical one. Whatever the starting baseline for defining the current generation, there is little doubt that the natural capital and the climate have in fact been damaged by the current generation, and that the line is not being held, notwithstanding the technological advances that will benefit future generations (although not all technological advances are necessarily desirable).

In constitutional terms, it is impossible to specify the size of this precautionary margin. The constitution of the sustainable economy should require institutions and individuals, in discharging their functions, to have regard to the precautionary principle in respect of these primary assets. In practice, this will mean that any official challenged in the courts for failing to do so will need to show how assessments have been made and what steps have been taken to implement them. The precautionary and the polluter-pays principles are what goes in the constitution, while the process is the pragmatic means to meet it.

What Should Be Passed Down the Generations

Regarding the first overarching principle to leave at least as good a set of assets for the next generation, some consensus will be needed on which assets are deemed most important. The constitution should make provision for, and give priority to, primary assets, those considered of primary importance for capabilities.

This does not mean that other assets are unimportant, or that they might not become primary in due course. The constitution could simply state the importance of primary assets in general and leave it to governments and the courts to decide the particular cases that fall inside and outside this category.

The intermediary position is to set out the general headings and provide some steers within each. Taking them in turn, natural capital assets fall into the primary category, because to be deprived of them makes it very difficult for any individual or business to function. The sustainable economy needs sustained natural capital. It is a fair bet that it always will do.

Some types of natural capital are nevertheless more important than others. All the really important ones are renewable natural capital: stuff that nature gives us for free and keeps on giving us in perpetuity provided the stocks are not depleted to levels below which they can reproduce themselves. There are overlapping types of renewable natural capital at the species level, at the catchment and local ecosystems level, and at the global level, right up to the climate. The constitution would require that all these levels of natural capital be kept at least above the thresholds, to the extent that national boundaries allow. The constitutional protections might extend to protected areas, lands and marine areas set aside for current and future generations.

The other main type of natural capital is the non-renewables – stuff that can, unless recycled, be used only once (except over extremely long time periods). More mineral deposits may eventually be formed, but not enough for millions of years to add to the resource base. These sorts of natural capital cannot be maintained as stocks, even if there is some recycling. This is true also of the minerals needed for low-carbon technologies, notably for electric car batteries and wind and solar generators. Someone uses them and, in order to meet the sustainable economy requirements, there must be compensation for their use now by the current generation for the next generation who will not be able

to consume them. Recycling has costs, even if it mitigates some of the depletion. The accounts should show the intergenerational spreading of the benefits.

Intergenerational accounts are key to demonstrating compliance with the first principle, and identifying violations. The non-renewables appear on the balance sheet, and as they are run down, there needs to be a corresponding and compensating adjustment. This can be to increase other assets, and in particular enhanced renewable natural capital, and could include contributions to future national dividend payments. The constitutional duty to maintain assets intact implies that conformity with these requirements does require that these accounts are kept and the balance sheet asset valuation cannot fall net of liabilities. It would otherwise be impossible to show how actions complied with the overarching first principle.

Human capital maintenance and enhancement are driven in the main through education and R&D. Education is a USO in the sustainable economy, a primary asset. Because people die, education needs to be continuously invested in to maintain the stock of human capital intact. The ideas, knowledge and technologies are assets-in-perpetuity, but only if people have access to them. The constitution can reflect this both by protecting basic and core R&D, as well as the research infrastructure that goes with it, and by enshrining a duty to provide universal education. The special additional requirement is to compel citizens to participate in education. It is a right and an obligation.

Physical capital comes in many different shapes, forms and sizes. For the bulk of the private sector there is no need to require constitutionally that it is protected. Frequently, depreciation applies, since physical assets decay and technology changes their economic values. However, there are some forms of physical capital which, though theoretically limited, in practice are best seen as assets-in-perpetuity. These provide citizens and businesses with water, energy, transport and communications. Since these are critical for capabilities, the general constitutional requirement to provide citizens with capabilities will be met through the provision of these basic system infrastructures. The principle is about the capabilities; the application is about the provision and capital maintenance of these systems. Citizens have a right to energy, water, transport and communications – and of course nature – reflected in USOs.

Finally, there is the complex and culturally dependent social capital. This is all about trust and resilience. It will be hard for a constitution to legislate for social capital, other than as a general principle, and hard for courts to decide whether this requirement is being met. A general reference is what is probably required here, recognising that it will be difficult to enforce. For example, commitments to religious freedoms may be included, but commitments to specific religions are to be avoided. Freedom of speech might require protection. Many constitutions make reference to these rights, without filling in the details. They flag them, leaving lots of leeway for interpretation. The flags have value even in such complex circumstances. Asking questions and shining a torch on what is going on is almost always a useful first step.

Limiting Government Discretion and the Importance of Rules

These rights and obligations need to be embedded in a constitution, otherwise they may be neglected as and when parliamentary majorities from time to time see it expedient to do so. A constitution is a limit to discretion by governments. The constitution is a set of rules, rules of the game that governments have to follow.

Historically, those keenest on limiting discretion have been conservatives, and conservative liberals in particular. The historical backdrop is the French Revolution: the fear that, in the absence of rules, revolutionary forces can tear up existing institutions. For those on the right, there is an assumption that revolutions lead to tyrannies. In the cases of the French Revolution in 1789, the Russian Revolution in 1917 and the Chinese Revolution in 1949, the evidence supports this hypothesis, eloquently set out by Burke and reinforced by Alexis de Tocqueville.¹⁴

Although many environmentalists find themselves on the left, and want to overturn ‘capitalism’, the central idea that there should be limits on discretion when it comes to nature is one that should appeal to them, as well as to conservatives. Discretion to cut down the rainforests, to destroy ancient woodlands and to build coal-fired power stations is in conflict with the idea that there should be rules to protect

¹⁴ See E. Burke (1790), *Reflections on the French Revolution*, London: James Dodsley; A. de Tocqueville (1835), *Democracy in America*, London: Saunders and Otley; and T. Paine (1792), *Rights of Man*, London: printed for J. Parsons as an alternative perspective.

natural capital. The absence of such constraints has not produced good outcomes. The sustainable economy principle of ensuring that the value of assets does not in aggregate go down, and the limitation on substitution between different asset classes, puts rules in the way of marginal calculations and discretion. Moreover, simple compensation rules and net gain policies tend not to be enough, not least because they get limited to individual assets, not ecosystems of natural capital.

Admittedly, the proposals for a new constitution are themselves revolutionary, in a sense similar to that in the context of the American Revolution. To develop the constitution outlined here would be a radical departure from the discretionary state that has built up piecemeal since the English Civil War and the Glorious Revolution of the seventeenth century. But then there is little chance of protecting natural capital, and having regard to the next generation, without entrenching these rights in a new constitution. Once in place, as with the American Constitution entrenching the American Revolution, the new constitution should be hard to change.

Ways of Amending Constitutions

Hard to change does not mean impossible. Constitutions are not strait-jackets, but rather tight coats. Circumstances change, and there needs to be a way of amending constitutions. Around the world a number of devices have been tested and introduced. There are supermajorities requiring, say, two-thirds or more of a parliament to approve. Sometimes, the ability to change the constitution not only requires a supermajority but restricts this to an upper house or senate. Others use referenda, and some, like the Swiss, on a very regular basis.¹⁵

There is a particular dimension of this limit to discretion which comes up in the sustainable economy. Some decisions have medium- and longer-term horizons, in a context in which parliaments cannot typically bind their successors. An example is climate change and the adoption of targets for net zero by 2050. While new information may lead to ex post revision of the target, the very existence of long-term targets and plans can condition expectations and significantly reduce costs. If everyone knows that there is a legal requirement to meet net

¹⁵ The Swiss example does not necessarily protect the environment. In June 2021, proposals to address climate change were rejected, for example.

zero by 2050, which is likely to be upheld by a supreme court under a constitution, and hence that the target will not be easily weakened, and if the energy sector knows there is a plan for fibre provision, and a target for the roll-out of electric vehicles, and the water sector knows that there is a requirement to increase tree cover in catchments, all their decisions can be implemented at lower cost. These commitments enable the system regulators to plan with less uncertainty and to do so consistently. Electric cars, for example, are likely to work better if the electricity networks are developed to cope in harmony.¹⁶

In all these examples, the constitution cannot mandate these planning activities in detail. Rather, they form part of the reasonable steps that governments should take to ensure that their conduct is consistent with the overarching first principle of leaving the next generation with a set of assets at least as good as those it inherited. Governments will need to show that they have acted in good faith, taken due notice of the polluter-pays and precautionary principles, and the system plans are one of the core ways of demonstrating this. Otherwise, the constitution should provide for legal challenge. It is an obvious step to align statutory duties of system regulators with the constitution's first principle and also the polluter-pays and precautionary principles. The constitution embeds these.

This constitutional approach feeds through into the stickiness of these longer-term plans. If, for example, the government makes proposals for transport which take out ancient woodlands, there could be a constitutional challenge since this violates the principles.¹⁷ There may be circumstances where this damage to renewable capital is nevertheless justified. The power of constitutional stickiness is that compensatory offsetting benefits would need to be very considerable. The principles mandate this.

In practice, membership of the EU provides for some such stickiness. The EU Directives are underpinned by the European Court of Justice. The EU Air Quality Directive mandates that citizens should be protected from urban air pollution breaching certain thresholds, and governments can be challenged through the courts for failures. A government of an EU member state could try to change the Directive, but

¹⁶ In regulation, this is sometimes called the 'fair bet principle'. See, for example, Ofcom (2020), 'Full Fibre Must Be Fair Bet', Dame Melanie Dawes speech to FTTH Council Europe, 3 December.

¹⁷ See again HS2. Glaister, 'HS2: Levelling Up or the Pursuit of an Icon'.

it does not have sole power to do this, and in practice once a Directive is in place, it would need a majority coalition of member states and then the European Parliament to abolish it. Directives have a number of features that mirror constitutional constraints. They create stickiness.

‘Taking back control’, the slogan of the UK BREXIT campaign, could be interpreted as a desire to break free of rules and constraints in the name of whatever the current parliamentary majority in the House of Commons dictates in the interests of the current generation. It is already apparent that this control is and will be used on occasion to weaken environmental constraints.¹⁸ Removing stickiness is likely to be to the overall detriment of the environment, even if there are specific counterexamples from time to time.

Outside the EU, there is no such protection in the UK, and the UK courts will struggle to hold the government to account for air quality violations, for example. An early example of the difficulties is the Climate Change Act. Under this Act, the CCC proposes five-year rolling carbon budgets, setting them for the next fifteen years. Parliament either accepts the proposals or the government has to come up with a new carbon budget which would have the same effect. The record of meeting the carbon budgets so far is poor,¹⁹ but there is no constitutional court to appeal to since there is no constitution that this failure violates. The European Court of Justice, by contrast, could be (and was) appealed to for violation of the Air Quality Directive, and indeed it found against the UK government and required remediation. This is constitutionalism and the supporting courts in action, limiting discretion and developing and enforcing medium- and longer-term targets that are not easily changed.

Proving the Rules Are Being Followed

Central to the sustainable economy and its constitutional protection is that any government can be held to account and hence have its performance measured against the overarching principles, and especially the

¹⁸ C. Burns and A. Jordan (2021), ‘Environmental Regulation in the Post-BREXIT Era’, 23 March, www.BREXITenvironment.co.uk/2021/03/23/environmental-regulation-post-BREXIT/.

¹⁹ Climate Change Committee (2020), ‘Reducing UK Emissions: 2020 Progress Report to Parliament’, 25 June, www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/.

first principle. This requires government to maintain intergenerational accounts. The accounting framework for the sustainable economy is designed precisely to answer the stewardship question, and to shine a torch on how well the government is doing in meeting the overarching principle. Put another way, unless there is a way of measuring whether the net natural and other assets are going up in value or down, holding a government to account is going to be extremely difficult, whatever the constitution says.

The first principle requires that the assets are maintained. Meeting this condition would be radical, because it would force the capitals to be maintained and, in the process, require either less spending elsewhere or higher taxes. By not paying for capital maintenance out of current revenues, we are living beyond our means, and the manifestation of this is in the deterioration of the asset base. This is the climate change, the biodiversity loss, the deterioration of catchments, the potholes in the roads, and so on. It is why our infrastructures are often poor.

In the constitutional approach, a budget presented to parliament which did not provide for proper levels of capital maintenance could be struck down by the courts. Governments proposing to reduce taxes and pay for current-account spending by borrowing would face legal challenge. This possibility would encourage finance ministers to set out how they are in fact meeting their capital maintenance obligations. In particular, ministers could not pretend that they are controlling public expenditure by putting off maintenance. Cutting capital maintenance, allowing the potholes in the road to get bigger, would fall foul of the courts. All budgets would be under the scrutiny of the offices protecting the constitution.

This may sound very intrusive and it could encourage vexatious legal challenges, but this need not be the case. All governments have to do is comply with the constitution, and there could be independent bodies, for example an enhanced office for budget responsibility, with the duty to check and opine on whether the constitutional requirements have been met. It could be built into the budgeting process. It need not delay action: the challenges would be *ex post*, and need not hold up implementation.

More generally, the balance sheet and the accounts presented by government could be audited by an independent body. This is something that happens in some countries automatically. In France,

there is an accounts court (*Le Chambre des Comptes*). The difference between the current situation and the constitutional one is that reporting on accounts and accounting practice would have teeth: if the accounts are found to be inconsistent with the constitution then legal action could follow. Put simply, it would be constitutionally illegal to cook the books, rather than as at present just embarrassing to have this pointed out.

Embedding the Intergenerational Constitution

The gap between the overarching constitutional principles and the way the constitution is interpreted and implemented is mediated by a range of institutions, all ultimately within the oversight of a supreme court. These are bodies that can be created to ensure that the first principle is properly embedded in practical outcomes. This is a key role for the regulatory institutions. The core headings are: the systems, the citizens' entitlements and the macroeconomic frameworks.

Each of these has a substantive role in the sustainable economy. Plans must be consistent with the first principle. In the sustainable economy, the system regulators for each of the main infrastructures have this planning function, guided by central government and consistent with the constitution. The system regulators have the duty to ensure resilience, security of supply and other long-range objectives like net zero. They can use markets to auction the system requirements, but not the systems themselves. Private companies or other organisations deliver them.

To meet the citizens' entitlements to fully participate in society, the USO requirements link to the national dividend. There will need to be a cash-in, cash-out fund with trustees, and the national accounts will need to show the surplus year-by-year net of capital maintenance. Much of this is technical and about the arithmetic and payments procedures, but there will also be some discretion over the projected economic growth. For this reason, the precautionary principle could entail a two-part payment, *ex ante* and *ex post*, as already outlined. It is the job of the fund's trustees to ensure that the rules are followed. The trustees' articles (its internal constitution) will need to be consistent with the overall constitution, and open to legal challenge.

The macroeconomic implications of the overarching constitutional first principle are considerable and radical. The sustainable

economy rules should include: balancing the current account of the national accounts, net of capital maintenance, with limited discretion to allow for exceptional surpluses and deficits; providing a mechanism for a fund to build up so that deficits resulting from or in response to crises are temporary; and ensuring that the balance sheet is non-declining. This means that any and all investments that enhance assets' values can be matched by debt and the state can borrow to invest. Increases in debt are matched by the assets the borrowing creates. Projects that do not add value – trophy projects – would most likely fall foul of this rule and would need some funding contribution deducted from the current accounts. This is not a cap on debt per se, as for example in the German debt rules,²⁰ but rather a rule that assets must be created to match or exceed debt liabilities except in exceptional, limited and temporary circumstances. It leaves government and its primary macroeconomic policy institutions, like the Bank of England, open to legal challenge.

The rules for monetary policy include an interest rate to be set in real terms in line with expected sustainable economic growth, linking the present to the future and setting the returns and hence incentives for saving. This can be enshrined in the mandate set by governments to the central bank. The government must make sure that the mandate itself is consistent with the first principle.

In terms of institutions, it is surprisingly simple to follow the above rules. Much of the institutional architecture is in place, even in the UK, and without a constitution. The current-account balance is an accounting exercise with limited discretion over the short-term deficits. This could be a task added onto the existing UK Office for Budget Responsibility, backed up by the existing National Audit Office, all under constitutional oversight.

Setting interest rates following the rules above could remain with the Bank of England and its Monetary Policy Committee. There are already rules (like the 2 per cent inflation target), and the sustainable economy macroeconomic rules could supplant them. In the US, the Federal Reserve already carries out these functions, and in the EU, the ECB has the relevant powers. The sustainable economy rules require a forecast of sustainable growth and a feedback correction rule;

²⁰ The debt limit, enshrined in the German constitution, limits new public debt to a maximum of 0.35 per cent of GDP.

and the process for setting the interest rate is again under the eye of the courts and the supreme court. The Bank of England would have to set out clear reasons for the decisions it takes. This procedure is an extension of what it already does. The difference in the sustainable economy is that it could be challenged.

As regards QE, this would be treated as an extreme and emergency measure, and there would be an automatic adjustment to the national balance sheet. In order for the balance sheet to continue to add up, there would need to be a provision for repairing the damage done by QE, and the Bank of England, the US Federal Reserve and the ECB would be required to set an exit strategy *before* they embarked on QE.²¹

The Stability Benefits

The advantages of the sets of rules above, and the institutions to deliver each of them, are measured by not only fulfilling the overarching objective, the first principle, but by doing so in a predictable and inherently stable way. It turns the macroeconomic financial instability and short-term planning cycles for the infrastructure systems into a predictable and stable macroeconomic framework and medium- and longer-term system planning. The extra dimension added in the sustainable economy is that all of the above must be carried out consistent with the first principle, and also with the polluter-pays and precautionary principles.

The sustainable economy rests on sustainable consumption, that is consumption that can be sustained by the current generation without prejudicing the opportunities and capabilities of the next generation. With the rules for systems and system planning, for the national dividend and for the setting of interest rates and the budgets for governments, the level of sustainable consumption is predictable and need not change significantly from year to year.

It is also likely that the sustainable economy constitution will help to maximise the sustainable consumption path because it will

²¹ There is a similar example relating to the exercise of QE by the ECB – the German courts have examined its consistency with the overarching constitution of Germany and found it initially worrying. See also House of Lords Economic Affairs Committee (2021), ‘Quantitative Easing: A Dangerous Addiction?’, 1st Report of Session 2021–2 HL Paper, 16 July.

enhance productivity. Instead of the last two decades of extreme financial instability, repeated economic and financial crises and very low productivity growth, the proper maintenance and enhancement of the infrastructures will feed through to lower costs for every business, the employment opportunities will help enhance human capital and the national dividend will contribute to flexible labour markets.

Long-term credible and stable investment plans will lower the costs of capital. Households will be able to save and invest in the context of greater financial stability, and the state will be able to ensure a smoother flow of savings into investments, and enhance those investments where they improve the balance sheet by targeting savings for investments into the four capitals, financed primarily by debt. Borrowing will be for investment, not consumption, for the future people and not for the present. Social capital, and especially trust between the generations, will be enhanced.

Constitutions are never perfect, and there are costs as well as benefits from going down the constitutional route. But without constitutional protection of the interests of the next generation, the chances of getting to the sustainable economy are slim. Constitutions are imperfect ways of creating stickiness in the face of actions that benefit the current generation at the expense of the next. They are not once-and-for-all, as the social contract theorists like Rawls would have us choose in a veil of ignorance. They are live frameworks of rules, sticky but nevertheless capable of evolution. It remains for the detail to be filled in to translate the principles of the sustainable economy into a practical and workable constitution.